# **CANADA**



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# General

Canada is located in Northern North America bordering the North Atlantic Ocean, Arctic Ocean and the Pacific Ocean. This publication covers only the Atlantic coast of Canada.

The climate varies from temperate in the S to subarctic and arctic in the N.

The terrain is mostly plains with mountains in the W and lowlands in the SE.

# **Buoyage System**

The IALA Buoyage System (Region B) is in effect. See Chart No. 1 for further IALA Buoyage System information.

# **Currency**

The official unit is the Canadian dollar, consisting of 100 cents.

# **Firing Areas**

Firing and bombing practices, and defense exercises take place in a number of areas off the coasts of Canada.

Firing Exercise Areas		
Area	Coordinates	Chartlet No.
Delta One	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Delta Two	44°19'N, 63°45'W 44°19'N, 63°30'W 44°10'N, 63°30'W 44°10'N, 63°45'W	1
Delta Three	44°10′N, 63°45′W 44°10′N, 63°30′W 44°00′N, 63°30′W 44°00′N, 63°45′W	1
Delta Four	44°10'N, 64°00'W 44°10'N, 63°45'W 44°00'N, 63°45'W 44°00'N, 64°00'W	1
Echo Two	44°19'N, 63°30'W 44°19'N, 63°00'W 44°00'N, 63°00'W 44°00'N, 63°30'W	1

Firing Exercise Areas		
Area	Coordinates	Chartlet No.
Golf One	44°00'N, 64°00'W 44°00'N, 63°30'W 43°30'N, 63°30'W 43°30'N, 64°00'W	1
Golf Two	44°00'N, 63°30'W 44°00'N, 63°00'W 43°30'N, 63°00'W 43°30'N, 63°30'W	1
Golf Three	43°30'N, 63°30'W 43°30'N, 63°00'W 43°00'N, 63°00'W 43°00'N, 63°30'W	1
Golf Four	43°19'N, 64°00'W 43°19'N, 63°30'W 43°10'N, 63°30'W 43°10'N, 64°00'W	1
Hotel One	44°00'N, 63°00'W 44°00'N, 62°30'W 43°30'N, 62°30'W 43°30'N, 63°00'W	1
Hotel Two	44°00'N, 62°30'W 44°00'N, 62°00'W 43°30'N, 62°00'W 43°30'N, 62°30'W	1
Hotel Three	43°30'N, 62°30'W 43°30'N, 62°00'W 43°00'N, 62°00'W 43°00'N, 62°30'W	1
Hotel Four	43°30'N, 63°00'W 43°30'N, 62°30'W 43°00'N, 62°30'W 43°00'N, 63°00'W	1

A vessel may be aware of the existence of a practice area from Local Notices to Mariners or similar method of promulgation and by observing the warning signals of the practice.

Except where stated, areas are only in use intermittently or over limited periods, and when it is intended that a firing practice and exercise area be used. This information will be promulgated by local Department of Transports, Marine Radio Broadcasts and may also be advertised in local newspapers. Maritime Command vessels are informed by Navigational Warning Messages (CANHYDROLANT).

# Government

Canada is a confederation with a parliamentary democracy. The recognized chief of state is Queen Elizabeth II.

The capital is Ottawa.

#### **Holidays**

The following holidays are observed:

January 1, New Year's Day; Good Friday; Easter Monday; the Monday preceding May 26, Victoria Day; July 1, Dominion Day; first Monday in September, Labor Day; second Monday in October, Thanksgiving Day; November 11, Remembrance Day; December 25, Christmas Day; and December 26, Boxing Day.

The Province of Quebec observes the following local holidays:

Epiphany; Ash Wednesday; Ascension Day; St. Jean Baptiste Day; All Saints' Day; and Conception Day.

Newfoundland observes the following holidays:

St. Patrick's Day; St. George's Day; Discovery Day; Orangeman's Day; Annual Regatta Day; and Boxing Day.

#### **Ice**

In February or March of each year, depending on the iceberg conditions, the International Ice Patrol begins its annual service of guarding the SE, S, and SW limits of the regions of icebergs in the vicinity of the Grand Banks of Newfoundland for the purpose of informing ships of the extent of this dangerous region. Reports of ice in this area are collected from passing ships and from Ice Patrol aircraft. Ice information is broadcast in Ice Patrol Bulletins. See Pub. 117 and U.S. Notice to Mariners No. 1 of each year.

It should always be borne in mind that all original reported positions of pack ice or bergs may be subject to large observational errors and that they become less reliable as time goes on, owing to the impossibility of forecasting the drift.

In the case of the bergs, the surface current, subsurface current, wind and the wash of the sea all have their effect on its drift, the current having the most effect, so that a berg is often seen drifting to windward.

The International Ice Patrol Service advises ship masters not to venture into pack ice N of latitude 45°30'N before the middle of April.

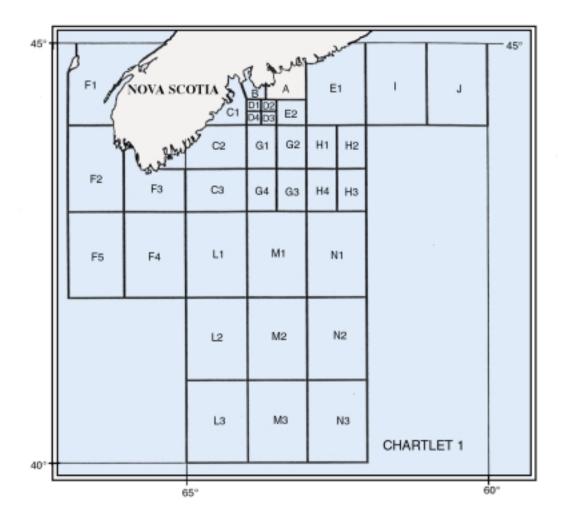
The Canadian Coast Guard has a limited number of icebreakers available for the escort and support of shipping although, they cannot always be provided when requested.

General requirements include the capability of communicating on the following frequencies: 2237 kHz, 2134 kHz, 2738 kHz, 2182 kHz, 156.8 MHz, and 156.3 MHz.

Experience has shown that non-ice-strengthened ships with an open water speed of about 12 knots often become hopelessly beset in relatively light ice conditions, whereas an adequately powered ice-strengthened ship should be able to make progress through six- or seven-tenths first year ice.

These latter ships are often able to proceed independently without any assistance other than routing advice. The route recommended by the appropriate Ice Operations Officer is based on the latest available information and masters are advised to adjust their course accordingly.

See also the sections on ice navigation in Bowditch, and the ice communications sections in Pub. 117 and Pub. 102.



Superstructure icing may be encountered in the Gulf of St. Lawrence, and in the proximity of the Newfoundland and Nova Scotia coasts during winter months.

Ice has been reported to form a thickness of about 10cm in 4 to 12 hours, when freezing air temperatures are combined with sea spray.

This combination rapidly produces an unstable condition in smaller vessels, and the danger should be minimized by adjusting course and speed to reduce the amount of spray being accumulated and by chopping the ice as it forms on the superstructure, seeking shelter, or if circumstances permit steering towards warmer water.

Observations indicate that icing is most frequently encountered W of the 40th meridian in the vicinity of Newfoundland and up to 250 miles from the Nova Scotia coastline between the months of January and March.

Vessels crossing the North Atlantic Ocean shall avoid, as far as practicable, crossing the Grand Banks of Newfoundland N of 43°N and pass outside regions known or believed to be endangered by ice.

The above precautions are also advisable in the vicinity of the Nova Scotia banks.

#### **Industries**

The main industries are processed and raw minerals, food products, wood and paper products, transportation equipment, chemicals, fish products, petroleum, and natural gas.

# Languages

Both French and English are official languages.

# **Offshore Drilling**

#### Oil Drilling

Oil drilling and production platforms may be encountered in increasing numbers in Canadian and adjacent waters.

Notices to Mariners and Notices to Shipping broadcast by radio are issued whenever possible to give information on the establishment, or changes in position, of these platforms.

It should be noted that information on the establishment, or change of position, may be received well after a platform is located in a new position, with the result that mariners may expect to encounter them without necessarily receiving prior information.

# **Pilotage**

The Atlantic Pilotage Authority, with its office in Halifax, is responsible for pilotage in Canadian waters in and around the provinces of Nova Scotia, Prince Edward Island, Newfoundland, and New Brunswick, including the waters of Chaleur Bay in the province of Quebec, S of Cap d'Espoir (48°25'N, 64°19'W.). It can be contacted, as follows:

1. Telephone: 1-877-272-3477 (toll free)

1-902-426-7610 (Inmarsat)

2. Facsimile: 1-877-745-3477 (toll free)

1-902-426-7236 (Inmarsat)

3. Telex: 01921500 PILOT HFX

4. E-mail: dispatch@atlanticpilotage.com

5. Website: http://www.atlanticpilotage.com

If direct communication is not possible, pilotage requests can be made through a Canadian Coast Guard radio station or a Vessel Traffic Service Center, indicating the addressee as "Atlantic Pilotage Authority."

For all Canadian waters in and around the province of Quebec, N of the seaward entrance to St. Lambert Lock, except the waters of Chaleur Bay, S of Cap d'Espoir, the Laurentian Pilotage Authority, with headquarters in Montreal, is responsible.

Great Lakes Pilotage Authority, with its head office in Cornwall, Ont., is responsible for pilotage in Churchill, Manitoba, and in all Canadian waters S of the seaward entrance to St. Lambert Lock in the province of Quebec, and in the province of Ontario. Local pilotage information is included in the principal descriptions of the ports.

# **Vessel Traffic Services (VTS)**

The Canadian Coast Guard has amalgamated its Vessel Traffic Services (VTS) and Coast Guard Radio Station (CGRS) programs into an organization called Marine Communications and Traffic Services (MCTS).

#### 1. Introduction

- 1.1 The purpose of this is to describe to shipboard personnel the procedures to be followed for participation in those Canadian VTS systems which utilize VHF communication networks. Participation in VTS systems is mandatory. Procedures have been developed in accordance with the Vessel Traffic Services Zones Regulations.
- 1.2 An amendment to the Vessel Traffic Services Zones Regulations now requires a report from vessels of 500 grt or greater, 24 hours prior to entering a VTS Zone.

Reporting requirements shall be as specified in the Vessel Traffic Reporting Systems for the Coastal and Offshore Waters of Canada, section 7.1.1 for Eastern Canada and section 9.1 for Western Canada.

#### 2. Application

- 2.1 The provisions of this Notice apply to:
  - (a) every ship 20m or more in length.
- (b) every ship engaged in towing or pushing any vessel or object, other than fishing gear, where:
  - (i) the combined length of the ship and any vessel or object towed or pushed by the ship is 45m or more.
  - (ii) the length of the vessel or object being towed or pushed by the ship is 20m or more in length.
- 2.2 The provisions of this Notice do not apply in respect of:
- (a) a ship engaged in towing or pushing any vessel or object within a log booming ground.
  - (b) a pleasure yacht that is less than 30m in length.
- (c) a fishing vessel that is less than 24m in length and not more than 150 gross tons.

# 3. Responsibility

- 3.1 There is no intention on the part of the Canadian Coast Guard to attempt to navigate or maneuver ships from a shore station and nothing in this overrides the authority of the master of his responsibility for the safe navigation of his ship. Information passed to the master is intended to assist him in the safe conduct of his ship.
- 3.2 An MCTS may, under specific circumstances, issue a direction to a ship. A ship shall comply with a direction.
- 3.3 Notwithstanding section 3.2, the master, pilot or person in charge of the deck watch may take any action that may be required to ensure the safety of life, the ship or any other ship.
- 3.4 The objective of VTS is to protect the marine environment and to improve the safety and efficiency of traffic movement, by providing the following services:
  - (a) A VHF Traffic Information and Advisory service, providing an exchange of relevant traffic and navigational safety information between ships and MCTS centers.
  - (b) A Traffic Clearance and Screening service, processing clearance requests from vessels intending to enter, leave, or proceed within Canadian waters.
  - (c) A Radar Navigational Assistance service, providing navigational assistance upon request.
  - (d) A Space Management service, organizing ship movements in order to facilitate efficient traffic flow.

#### 4. Communications

- 4.1 Radiotelephone procedures used in communicating with an MCTS center are those specified by the International Telecommunications Union in the "Manual for Use by The Maritime Mobile and Maritime Mobile Satellite Services."
- 4.2 The master of a ship shall ensure that before the ship enters a VTS Zone the ship's radio equipment is capable of receiving and transmitting radio communications on the VHF channel and radio frequency set out in the appropriate schedule.
- 4.3 A continuous listening watch shall be maintained on the channel and on the radio frequency referred to in the appropriate schedule, on radio equipment located:
  - (a) At any place on board the ship, where the ship is at anchor or moored to a buoy.
  - (b) In the vicinity of the ship's conning space, where the ship is underway.

- 4.4 The listening watch referred to in section 4.3 may be suspended if an MCTS officer directs the ship to communicate with coast stations and other ship stations on a different channel and radio frequency.
- 4.5 MCTS centers will be identified by the name given in the appropriate schedule. Ships will be addressed by their names.
- 4.6 All times given in VHF reports shall be in local time and in accordance with the 24-hour clock system. Please refer to the appropriate schedule for a description of local time
- 4.7 Only communications related to traffic movement, Notices to Shipping, navigation safety calls, distress, or casualty or pollution should be made on the traffic frequency. Public correspondence will not be accepted.
- 4.8 Navigation safety calls on the designated VTS frequency should be kept to a minimum consistent with the safety requirement of the situation.

## 4.9 Radio Equipment Malfunction

4.9.1 In the event of a VHF radio equipment failure by ships within or intending to enter a VTS zone, the appropriate MCTS center should be advised at the earliest opportunity through a coast or ship radio station stating the malfunction of equipment and the ship's position and destination.

In such circumstances, ships may proceed without obtaining a clearance as stated in section 5.3; however, ships shall then proceed to the nearest reasonable safe port or anchorage enroute where the equipment can be repaired.

4.9.2 In circumstances where radiocommunications cannot be established for reasons other than radio failure, the information should be passed, by audio or visual means, to another ship, if feasible.

Any ship receiving such information should inform the MCTS center by the most direct means. In such circumstances, ships may proceed without obtaining a clearance as stated in section 5.3.

#### 5. Traffic Clearance

- 5.1 A "traffic clearance" is an authorization for a ship to proceed subject to such conditions as may be included in the authorization. The clearance is predicated upon ship report information and known waterway/traffic conditions. A traffic clearance does not supplant other authorizations required by legislation or by-laws.
- 5.2 Should any factor upon which the clearance is predicated alter to the detriment of safe navigation, the clearance may be delayed or other conditions may be attached to the clearance.
  - 5.3 A traffic clearance is required before:
    - (a) entering a zone (See 1.2 and 6.2.).
    - (b) commencing a departure maneuver (See 6.5.).
  - (c) commencing a maneuver that may be detrimental to safe navigation (See 6.6.1.).
- 5.4 A traffic clearance may be obtained by providing the appropriate report in accordance with procedures specified in the appropriate sections.

#### 6. Reports

The master of a ship shall ensure that reports are made in accordance with the following requirements.

- 6.1 The following information may be required in a report:
  - (a) the name of the ship
  - (b) the radio call sign of the ship
  - (c) the position of the ship
  - (d) estimated time that the ship will enter the VTS zone
  - (e) the destination of the ship
  - (f) estimated time the ship will arrive at its destination
- (g) whether any pollutant or dangerous goods cargo is carried on board the ship or any vessel or object being towed or pushed by the ship
  - (h) the estimated time that the ship will depart the berth
- (i) the estimated time at which the ship will next arrive at a location requiring a report
- 6.2 Regulations for entering a zone:

At least 15 minutes before a ship intends to enter a zone, a report shall be made to an MCTS officer specifying the information listed in 6.1(a), (b), (c), (d), (e), (f) and (g).

Ships in possession of a valid Traffic Clearance as described in Section 5 are not required to provide this report.

- 6.3 When a ship arrives at a Calling-In-Point (C-I-P) specified in the schedules or Notice, a report shall be made to an MCTS officer specifying the information listed in 6.1(a), (c), and (i).
- 6.4 As soon as practicable after a ship arrives at a berth, a report shall be made to an MCTS officer specifying the information listed in 6.1(a) and (c).
- 6.5 "Departure maneuver" is defined as an operation during which a vessel leaves a berth and gets safely underway.
  - 6.5.1 Immediately before commencing a departure maneuver, a report shall be made to an MCTS officer specifying the information listed in 6.1(a), (b), (c), (e), (f), (g), and (h).
  - 6.5.2 Immediately after completing the departure maneuver, a report shall be made to an MCTS officer specifying the information listed in 6.1(a), (c), and (i). 6.6 Maneuvers
  - 6.6.1 Fifteen minutes prior to commencing any maneuver such as:
    - (a) a compass adjustment
    - (b) the calibration and servicing of navigational aids
    - (c) a sea trial
    - (d) a dredging operation
    - (e) the laying, picking up and servicing of submarine cables; or any other maneuver that may be detrimental to safe navigation, a report shall be made to an MCTS officer specifying information listed in 6.1(a) and (c), plus a description of the intended maneuver.
  - 6.6.2 As soon as practical after the maneuver is completed, a description of the maneuver just completed shall be made to an MCTS officer.
  - 6.7 Non-routine Reports
  - 6.7.1 Any of the following conditions shall be immediately reported to an MCTS officer, along with information specified in 6.1(a) and (c):

- (a) the occurrence on board the ship of any fire.
- (b) the involvement of the ship in a collision, grounding, or striking.
- (c) any defect in the ship's hull, main propulsion systems or steering systems, radars, compasses, radio equipment, anchors, or cables.
- (d) any discharge or probable discharge of a pollutant from the ship into the water.
  - (e) revoked.
  - (f) another ship in apparent difficulty.
  - (g) any obstruction to navigation.
- (h) any aid to navigation that is functioning improperly, damaged, off-position, or missing.
  - (i) the presence of any pollutant in the water.
- (j) the presence of a ship that may impede the movement of other ships.
- (k) any ice and weather conditions that are detrimental to safe navigation.

Items (g), (h), and (i) are not required if the information has been previously promulgated by a Notice to Shipping.

Mariners are encouraged to provide, on a voluntary basis, any information pertaining to charts and publications which may not be on board so that arrangements can be made to embark the necessary items.

#### 7. Variations

7.1 Ferries and other vessels on a regularly scheduled voyage may be exempted from making routine reports.

Variations to reporting procedures will be granted only where alternate arrangement to provide essential information are made and where the equivalent procedure or practice is the same as that required in the regulations. Variations may be obtained by submitting a written request to the appropriate Regional Director, Canadian Coast Guard.

7.2 In circumstances other than those covered in 7.1, variation from time to time may be granted by an MCTS officer where the procedure or practice requested is as safe as that required in the regulations.

# Vessel Traffic Reporting Systems for the Coastal and Offshore Waters of Canada

#### 1. Introduction

- 1.1 The purpose of this is to describe the ship reporting procedures to be followed by vessels when:
  - (a) within or intending to enter the waters of Eastern Canada or Arctic Canada not contained within a local Vessel Traffic Services Zone.
  - (b) intending to enter the waters of Western Canada. **Note.**—Information regarding entering the waters of

Western Canada may be found in Pub. 120, Sailing Directions (Enroute) Pacific Ocean and Southeast Asia.

1.2 Ice information, ice routing, and icebreaker assistance may be obtained through the Eastern Canada Traffic System (ECAREG CANADA) and the Arctic Canada Traffic System (NORDREG CANADA).

Refer to the Annual Edition, Notice to Mariners and the publication "Ice Navigation in Canadian Waters."

1.3 An amendment to the Vessel Traffic Services Zone Regulations requires a report from vessels of 500 grt or greater, 24 hours prior to entering a VTS Zone. Reporting requirements shall be as specified in section 7.1.1 for Eastern Canada.

## 2. Zone description

The coastal and offshore waters of Canada have been subdivided into three distinct zones, each with their own telegraphic identifier. These zones are Eastern Canada VTS (ECAREG), Arctic Waters VTS (NORDREG), and Cooperative VTS (CVTS Offshore) on the W coast of Canada.

#### 2.1 Eastern Canada

Eastern Canada Vessel Traffic Services Zone is a mandatory system and includes Canadian waters on the E coast of Canada and Fishing Zone 1 (Gulf of St. Lawrence) as prescribed by the Fishing Zones of Canada (Zones 1, 2 and 3) Order:

- (a) S of parallel of 60°N.
- (b) in the St. Lawrence River E of 66°W.

It excludes the waters of Ungava Bay and the waters within the Vessel Traffic Services Zones for Halifax Harbour and Approaches, the Bay of Fundy and Approaches, Port aux Basques Harbour and Approaches, Placentia Bay and Approaches, St. John's Harbour and Approaches, the Strait of Canso and Approaches, and Northumberland Strait as defined in the Annual Edition, Canada Notices to Mariners.

Telegraphic Identifier—ECAREG CANADA Facsimile—(902) 426-4483 or (709) 772-5369 Telex—019-22510 or 016-4530

#### 2.2 Arctic Canada

Arctic Canada Traffic Zone includes those waters of Ungava Bay, Hudson Bay and James Bay south of the parallel of 60 north latitude and the waters to which the Arctic Waters Pollution Prevention Act apply.

It excludes MacKenzie Bay and Kugmallit Bay south of the parallel of 70° north latitude and east of the meridian of 139 west longitude.

Telegraphic Identifier—NORDREG CANADA Facsimile—(867) 979-4236 or (867) 979-4264 Telephone—(867) 979-5724 or (867) 979-5269 Telex—063-15529

# 2.3 Western Canada

See Pub. 120, Sailing Directions (Enroute) Pacific Ocean and Southeast Asia for further information.

# 3. Application

# 3.1 ECAREG

With respect to the Eastern Canada VTS Zone, the Eastern Canada Vessel Traffic Services Zone Regulations apply to every ship of 500 grt or more. Participation is mandatory.

#### 3.2 **NORDREG**

With respect to the Arctic Canada Traffic Zone the provisions of this notice apply to every ship of 300 tons,

gross tonnage, or more. Participation is voluntary; however, mariners are encouraged to participate fully to receive the maximum benefit.

#### 3.3 Western Canada

See Pub. 120, Sailing Directions (Enroute) Pacific Ocean and Southeast Asia for further information.

#### 3.4 All zones

In addition, the provisions of this notice apply (on a mandatory or voluntary basis, as applicable) to all other ships meeting the following criteria:

- (a) every ship that is engaged in towing or pushing one or more vessels, where the combined tonnage of that ship and its tow amounts to 500 grt or more.
- (b) every ship carrying a pollutant or dangerous goods, or engaged in towing or pushing a vessel carrying a pollutant or dangerous goods as prescribed in the following:
  - i. Oil Pollution Prevention Regulations;
  - ii. Pollutant Substances Regulations;
  - iii. Dangerous Goods Shipping Regulations;
  - iv. International Maritime Dangerous Goods Code (IMDG); and
  - v. Dangerous Chemicals and Noxious Liquid Substances Regulations.

# 4. Responsibility

- 4.1 There is no intention on the part of the Canadian Coast Guard to attempt to navigate or maneuver ships from a shore station and nothing in this Notice overrides the authority of the master for the safe navigation of his ship. Information passed to the master is intended to assist him in the safe conduct of his ship.
- 4.2 The master shall supply all information that is required of him by this notice. A Marine Traffic Regulator may under specific circumstances issue a direction to a ship.
- 4.3 Notwithstanding section 4.2, the master, pilot or person in charge of the deck watch may take any action that may be required to ensure the safety of the ship or any other ship.
- 4.4 When the required communications cannot be conducted owing to radio difficulties, a ship may continue with its voyage and the master shall take all reasonable measures to report the occurrence to a Marine Traffic Regulator as soon as possible and shall proceed to the nearest safe port or anchorage on his route where the radio equipment can be repaired.

#### 5. Traffic clearance

5.1 A "traffic clearance" is an authorization for a ship to proceed subject to such conditions as may be included in the authorization. A traffic clearance does not eliminate the need for other authorizations required by legislation or by-laws.

# 5.2 A traffic clearance is required before:

1. entering a traffic zone (see 1.3 and 7.1 or 8.1 as appropriate).

- 2. departing a berth (see 7.3 or 8.3 as appropriate).
- 3. proceeding after being stranded, stopped due to breakdown of main propulsion machinery or steering gear, or having been involved in a collision (see 6.4.1).
- 5.3 A traffic clearance may be obtained by providing the appropriate report in accordance with procedures specified in the appropriate sections.

#### 6. Reports

#### 6.1 General

All times given in reports required by this notice shall be Coordinated Universal Time (UTC).

A report shall use the appropriate telegraphic identifier and be communicated to the nearest Canadian Coast Guard MCTS Center.

The master of a ship shall ensure that reports are made in accordance with the stated requirements.

## 6.2 **Information required**

The following information may be required in a report:

- (a) the name of the ship.
- (b) the radio call sign of the ship.
- (c) the name of the master of the ship.
- (d) the position of the ship.
- (e) the time the ship arrived at the position.
- (f) the course of the ship, if any.
- (g) the speed of the ship, if any.
- (h) the prevailing weather conditions (including ice, applicable).
- (i) the estimated time that the ship will enter the Vessel Traffic Services Zone.
  - (j) the estimated time the ship will depart the berth.
  - (k) the destination of the ship.
  - (1) the ETA of the ship at the destination.
- (m) the route the ship intends to take through the Vessel Traffic Services Zone to arrive at the destination.
  - (n) the name of the last port of call of the ship.
  - (o) the draft of the ship.
- (p) any dangerous goods, listed by class, or pollutant, that is carried on board the ship or vessel being towed or pushed by the ship.
  - (q) revoked.
- (r) any defect in the ship's hull, main propulsion machinery, steering system, radars, compasses, radio equipment, anchors or cables.
- (s) any discharge, or threat of discharge, of a pollutant from the ship into the water, and any damage to the ship that may result in the discharge of a pollutant from the ship into the water.
- (t) the name of the Canadian or United States agent of the ship.
- (u) the date of expiration of a certificate referred to in Article VII of the International Convention on Civil Liability for Oil Pollution Damage, 1969/1992; the International Oil Pollution Prevention Certificate; the International Pollution Prevention Certificate for the Carraige of Noxious Liquid Substances in Bulk; the Certificate of Fitness; the Certificate of Compliance; and the ISM Safety Management Certificate and the ISM Document of Compliance, if any, issued to the ship.

#### 6.3 Routine reports

Procedures for providing routine reports are described in the appropriate zone procedures in section 7 (ECAREG) and section 8 (NORDREG).

#### 6.4 Non-routine reports

# 6.4.1 Stranding, Propulsion or Steering Failure, and Collision

When a ship is within the Eastern Canada VTS Zone or Arctic Canada Traffic Zone, a report is required immediately before a ship proceeds underway after being stranded, or having had a propulsion or steering gear failure, or having been involved in a collision. The following information shall be provided:

- (a) name of ship.
- (b) position of ship.
- (c) description of the incident.

#### 6.4.2 Other occurrences

Any of the following conditions should be immediately reported when the ship is within or about to enter a zone:

- (a) the occurrence on board the ship of any fire.
- (b) the involvement of the ship in a collision, grounding, or striking.
- (c) any defect in the ship's hull, main propulsion systems, steering systems, radars, compasses, radio equipment, anchors, or cables.
  - (d) another ship in apparent difficulty.
  - (e) any obstruction to navigation.
- (f) any aid to navigation that is functioning improperly, damaged, off-position, or missing.
- (g) any ice and weather conditions that are detrimental to safe navigation.
  - (h) the presence of any pollutant in the water.

**Note.**—Items (e), (f), and (h) are not required if the information has been previously promulgated by a Notice to Shipping.

Mariners are encouraged to provide, on a voluntary basis, any information pertaining to charts and publications which may not be on board so that arrangements can be made to embark the necessary items.

# 6.4.3 Change in information

A report shall be made whenever a significant change occurs in the information contained in any report made pursuant to this Notice, except in the case of reports 7.4 and 8.5.

#### 7. ECAREG—Routine reports

#### 7.1 Entering the zone

7.1.1 A report containing the information listed in 6.2, except item (j), shall be made 24 hours prior to entering the zone, or as soon as practicable where the estimated time of arrival of the ship at the zone is less than 24 hours after the time the ship departed from the last port of call.

Note.—This report is not required in a case where:

- (a) the ship is on a voyage between two ports within the zone, and
- (b) the ship is entering the zone directly from the Arctic Canada Traffic Zone, and is in possession of a valid NORDREG Clearance.

7.1.2 A report containing the information listed in 6.2(a), (b), (d), (h), and (i), shall be made immediately before the ship crosses the zone boundary when entering the zone. This report is not required when entering directly from a local VTS zone.

#### 7.2 Arriving at a berth

A report shall be made on arrival of the ship at the berth, containing the information listed in 6.2(a), (b), and (j) as well as the following information:

- (a) port of arrival.
- (b) time of arrival.

### 7.3 Departing a berth

This report is not required where the ship is proceeding to another berth in the same port.

A report containing the information listed in 6.2, except item (i), shall be made 2 hours before a ship departs a berth.

A traffic clearance to depart a berth is valid for 1 hour from estimated time of departure. Where a traffic clearance to depart a berth has expired because of a revised time of departure, a new traffic clearance is required. In this case, the report need only contain the ship's name, call sign, position and revised time of departure.

# 7.4 Exiting the zone

A report containing the information listed in 6.2(a), (b), (d), and (h) shall be made immediately before the ship crosses the seaward boundary.

In a case where exiting a zone coincides with entering a local VTS zone, this report is not required.

#### 7.5 Supplemental SAR information

In addition to those reports required by the Eastern Canada Vessel Traffic Services Zone Regulations, Search and Rescue authorities have requested that ships entering Canadian waters for the first time answer the following question:

Is your vessel EPIRB equipped? If not, please supply the following information:

- (a) number of crew and passengers.
- (b) number of lifeboats and life rafts plus make and capacity.
  - (c) color of hull and superstructure.
  - (d) distinctive features.

This information need only be updated as necessary. The information will be maintained on a database and made available to Search and Rescue personnel when required.

# 8. NORDREG—Routine reports

#### 8.1 Entering the zone

- 8.1.1 A report containing the information listed in 6.2, except item (j), but including the following information:
  - (a) ice class (type or Arctic class category), if applicable, and Classification Society;
  - (b) amount of oil on board (fuel and cargo), if such amount exceeds 453 cu. m. (15,988 cu. feet); and
  - (c) date of issue of Arctic Pollution Prevention Certificate, if carried and name of Classification Society;

shall be made 24 hours prior to entering the zone, or as soon as practical where the estimated time of arrival of the ship at the zone is less than 24 hours after the time the ship departed from the last port of call.

If the ship is entering the zone directly from the Eastern Canada Vessel Traffic Services Zone, and is in possession of a valid ECAREG Clearance, only items 8.1.1(a), (b), and (c) need be reported.

8.1.2 A report containing the information listed in 6.2(a), (b), and (d) shall be made immediately before the ship crosses the zone boundary when entering the zone.

#### 8.2 Arriving at a berth

A report shall be made on arrival of the ship at the berth, containing the information listed in 6.2(a), (b), and (j) as well as the following information:

- (a) port of arrival.
- (b) time of arrival.

#### 8.3 Departing a berth

- 8.3.1 This report is not required where the ship is proceeding to another berth in the same port.
- 8.3.2 A report containing the information listed in 6.2(a), (b), (h), (j), (k), (l), (m), (p), and 8.1.1(b), and any change to previously reported items 6.2(r), (s), (t), and (u), shall be made not more than 2 hours and not less than 1 hour before departing a berth.
- 8.3.3 If the estimated time of departure changes by more than 1 hour, a report shall be made containing the revised estimated time of departure.
- 8.3.4 A report shall be made when the ship has departed the berth, giving the actual time of departure.

#### 8.4 **1600 UTC report**

A report containing the information listed in 6.2(a), (b), (d), and (h) shall be made daily at 1600 UTC.

# 8.5.1 **Ice Regime Routing Message**

When the Arctic Ice Regime Shipping System is used, the Arctic Shipping Pollution Prevention Regulations (ASPPR) require that an Ice Regime Routing Message be sent to NORDREG. This message can be brief; however, if the vessel's route includes areas on ice analysis charts with ice concentrations that may have negative Ice Numerals, the message should include additional pertinent information explaining the voyage plan (e.g., expectations of changes in conditions and/or other considerations). The message should be updated if the plan and/or ice conditions change significantly.

The Ice Regime Routing Message should include:

- (a) ship name.
- (b) ship call sign and IMO number.
- (c) the ice strengthening of the ship (Type/CAC/Arctic class, etc.).
  - (d) date and UTC time.
  - (e) ship's current position, course, and speed.
  - (f) anticipated destination.

- (g) intended route.
- (h) a listing of the ice regimes and their associated Ice Numerals.
  - (i) source(s) of ice information.
  - (j) any other pertinent information or comments.
  - (k) name of any escorting vessel.
  - (l) name(s) of the Ice Navigator(s) on board.

# 8.5.2 After Action Report

When the Arctic Ice Regime Shipping System is used, in accordance with the ASPPR, an after action report is to be submitted. The report can be brief; however, in cases where the voyage has involved difficulties or unexpected occurrences, it will be valuable to include additional information. Unlike the routing message, the After Action Report is to be sent to Transport Canada, as follows:

Regional Director, Marine Prairies & Northern Region—ANMS Transport Canada, Place de Ville, Tower "C" 330 Sparks Street, 14th Floor Ottawa, Ontario K1A 0N5

Facsimile: (613) 991-4818

The After Action Report should include:

- (a) ship name.
- (b) the ice strengthening of the ship (Type/CAC/Arctic class, etc.).
- (c) a description of the actual route, including transit speeds, the ice regimes encountered, and the Ice Numerals for each.
  - (d) copies of the ice information used.
  - (e) escort information, if applicable.
    - (1) duration of the escort.
    - (2) ice regime under escort.
    - (3) characteristics of the track.
  - (f) weather conditions and visibility.
  - (g) any other important information.

# 8.6 Exiting the zone

A report containing the information listed in 6.2(a), (b), (d) and (h), shall be made immediately before the ship crosses the seaward boundary.

#### **East Coast Local VTS Zones**

East Coast VTS Local Zones have been established for traffic to St. John's, Placentia Bay, Port Aux Basques, Strait of Canso, Halifax, Northumberland Strait, Bay of Fundy, and St. Lawrence Waterway. The appropriate Sailing Directions (Enroute) volumes should be consulted.

#### Regulations

# **Chart and Publications Regulations**

Extracts from the Canadian regulations are quoted below:

1. These regulations may be cited as the Chart and Nautical Publications Regulations, 1995.

- 6.1 Subject to subsection 6.3, the person-in-charge of the navigation of a ship in waters under Canadian jurisdiction shall use, in respect of each area to be navigated by the ship, the most recent edition of:
  - (a) the reference catalog i.e., Catalogue of Nautical Charts and Related Publications.
  - (b) the annual edition of the Notices to Mariners, published by the Department of Transport.
    - (c) the following publications, namely:
      - (i) sailing directions, published by the Canadian Hydrographic Service.
      - (ii) tide and current tables, published by the Canadian Hydrographic Service.
      - (iii) lists of lights, buoys, and fog signals, published by the Department of Transport.
      - (iv) where the ship is required to be fitted with radio equipment pursuant to any Act of Parliament or of a foreign jurisdiction, the Radio Aids to Marine Navigation, published by the Department of Transport
  - (d) the documents and publications listed in the Schedule of Documents and Publications.
- 6.3 The documents and publications referred to in paragraphs 6.1(c) and (d) may be substituted for similar documents and publications issued by the government of another country, if the information contained in them that is necessary for the safe navigation of a ship in the area in which a ship is to be navigated is as complete, accurate, intelligible, and up-to-date as the information contained in the documents and publications referred to in those provisions.
- 7. The master of a ship shall ensure that the charts, documents, and publications required by these regulations are, before being used for navigation, correct and up-to-date, based on information that is contained in the Notices to Mariners, Notices to Shipping, or Radio Navigational Warnings.

#### Schedule of Documents and Publications

- 1. Regulations 1, 7, and 8 of Chapter II, and Resolutions 1, 3, and 6 of the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978, published by the International Maritime Organization and reprinted as the Code of Nautical Procedures and Practices, 1985, by the Department of Transport.
- 2. Ice Navigation in Canadian Waters, published by the Department of Transport, where the ship is making a voyage during which ice may be encountered.
- 3. Table of Life-Saving Signals, published by the International Maritime Organization and reprinted by the Department of Transport, where the ship is making a foreign voyage, a home-trade voyage, Class I, II, or III, or an inland voyage, Class I.
- 4. The Merchant Ship Search and Rescue Manual (MERSAR), published by the International Maritime Organization, where the ship is making a foreign voyage or a home-trade voyage, Class I or II.
- 5. Where the ship is required to be fitted with radio equipment and is making a foreign voyage or a home-trade voyage, Class I or II, the following publications, published by

the International Maritime Organization and reprinted by the Department of Transport:

- (a) the International Code of Signals
- (b) the Standard Marine Navigational Vocabulary

The Seaway Handbook contains the St. Lawrence Seaway Regulations, and other information related to the use of the Seaway. A copy of this publication is to be carried on every vessel in transit through the St. Lawrence Seaway.

It may be obtained from the St. Lawrence Seaway Management Corporation, 202 Pitt Street, Cornwall, Ontario, K6J 3P7, Canada; telephone: (613) 932-5170 (extension 3626); fax: (613) 932-7268; e-mail: marketing@seaway.ca; web address: http://www.greatlakes-seaway.com.

Seaway Notices are issued as conditions require and are available upon request to the Canadian Seaway Authority or the U.S. Seaway Development Corporation which is headquartered in Washington, D.C.

# **Oil Pollution Damage**

The International Convention on Civil Liability for Oil Pollution Damage 1992 (CLC) came into force on May 29, 1999 for Canada. All vessels covered by this convention are now required to carry a certificate showing that a contract of insurance or other security that satisfies the requirements of the 1992 CLC is in force with respect to the vessel. The area of application has now been extended to include voyages to offshore terminals within the Exclusive Economic Zone EEZ). This means that some vessels previously exempt under the 1969 CLC may now be subject to the requirements for certification under the 1992 CLC. A 1992 CLC certificate is required for all ocean-going vessels carrying, in bulk as cargo, more than 2,000 tons of crude oil, fuel oil, heavy diesel oil, lubricating oil, or any other persistent hydrocarbon mineral oil that enters of leaves a port or offshore terminal within Canadian waters or the Canadian EEZ.

As of April 1995, Canadian Shipping Act amendments require that oil tankers of 150 grt, and all other vessels of 400 grt trading in Canadian waters, enter into an arrangement with a certified response organization.

Such vessels must also carry a declaration attesting to the existence of an arranged response also naming the ship's insurer and persons authorized to implement the vessel's oil pollution emergency plan and its clean up.

Under the amendments any person or ship found discharging pollutants in Canadian water faces fines of up to \$250,000 (Canadian dollars) and or 6 months imprisonment. Individuals found guilty of a marine pollution related offense face fines of up to \$1 million (Canadian dollars), and/or 3 years imprisonment.

#### **Conservation of Marine Animals**

The Federal Department of Fisheries and Oceans ensures the protection and conservation of marine mammals in Canadian waters. Harassing whales changes or interferes with their behavior, forces them away from their habitat at critical times in their annual reproduction and feeding cycles, and may cause them injury.

The Marine Mammal Regulations of the Fisheries Act (R.S.C., 1985, c.F.-14. Amended 1993) prohibit any form of

harassment of cetaceans, including repeated attempts to pursue, disperse, or herd whales and any repeated intentional act of negligence resulting in disruption of their normal behavior. Individuals who contravene the Marine Mammal Regulations are guilty of an offense and liable to a fine not exceeding \$500,000 and twenty four (24) months imprisonment (Fisheries Act sec. 78).

The following are general guidelines for dealing with marine mammals:

- 1. Do not hunt, chase, follow, disperse, drive, herd, or encircle whales.
  - 2. Avoid any sudden changes of course or speed.
  - 3. Avoid heading directly toward a whale.
- 4. If in an area known to be frequented by whales, be on the lookout to avoid collisions.
  - 5. Travel parallel to whales' direction of travel.
- 6. The whales may come close to you; if they do, do not chase them. These animals may be calves that approach while their mothers are submerged feeding. Keep clear of the tail.
- 7. If you are operating a sailing vessel with an auxiliary motor, leave it in idle or turn on the echo sounder to signal your presence.
- 8. If it is impossible to detour around a whale or group of whales, slow down immediately and wait until you are more than 400m away before resuming speed.

The North Atlantic right whale (Eubalaena glacialis) is the rarest large whale species in the world. Current estimates indicate that only about 300 occur along the E coast of North America. Sightings have been reported from the Gulf of Mexico to Iceland, but most of the population now is distributed between Nova Scotia and Florida. Concentrations of right whales have been documented in the Bay of Fundy and in Roseway Basin (between Browns and Baccaro Banks on the southern Scotian Shelf) from early summer to late autumn.

Right whales can be identified from a distance by the shape of the blow or spout, which is bushy and appears "V" shaped when seen head-on, and can be 5m high. Adult right whales are medium-sized, robust whales 14 to 17m long and can weigh up to 100 tons. Calves are 6 to 7m long. Right whales have dark gray or black skin. Their backs are broad and they have no dorsal fin or ridge. On the top of their heads, patches of raised and roughened skin (called callosities) that appear white occur.

Right whales are slow swimmers, seldom moving faster than 3 to 5 knots. They may stay submerged for 15 to 20 minutes when feeding on plankton. Because a right whale or group of right whales frequently spend periods lying at the surface, they are vulnerable to collisions with ships. Collisions with ships are one of the main sources of human-related mortality.

Ships operating in the right whale critical areas in the Bay of Fundy and Roseway Basin should ask all watches to keep a lookout for right whales. During the night and other periods of reduced visibility, vessel operators should use the slowest safe speed to reduce the risks of collisions with right whales.

Despite all precautions, collisions may still occur. Please report all sightings to the appropriate authority. The information you provide is important in monitoring the population and will be held in confidence.

The following seasonal guidelines for Right Whale Critical Areas are in effect from June through November and are provided to assist mariners avoid, disturb, or strike right whales:

- 1. Grand Manan Basin, Bay of Fundy.—This area, which is important to right whales for feeding and socializing and is where mothers bring their calves, is bounded by lines joining the following positions:
  - a. 44 45'N, 66 35'W
  - b. 44 45'N,66 18'W
  - c. 44 30'N, 66 18'W
  - d. 44 30'N,66 35'W

The major threats to right whales in this area are collisions with ships and entanglement in fixed fishing gear.

Avoid this area if possible. Due to a large portion of this habitat occurring in or near the main shipping channel to Saint John, New Brunswick, this may not be possible.

If the area cannot be avoided, decrease vessel speed, post a lookout, and steer ship around any right whales.

If a right whale is sighted or a collision occurs, please report the position (in latitude and longitude) to the Department of Fisheries and Oceans via any Canadian Coast Guard Radio Station, or fax at 902-426-8003 or via Fundy Traffic Control (VHF channel 14).

- 2. Roseway Basin, located between Browns and Baccaro Banks on the southern Scotian Shelf.—This area, which is important to the right whales for feeding and socializing, is bounded by lines joining the following positions:
  - a. 43 05'N65 40'W
  - b. 43 05'N65 03'W
  - c. 42 45'N65 03'W
  - d. 42 45'N65 40'W

The major threats to right whales in this area are collisions with ships and entanglement in fixed fishing gear.

Avoid passage through this area. This area can easily be bypassed to the N or S.

If passage through this area is necessary, decrease vessel speed, post a lookout, and steer ship around any right whales.

If a right whale is sighted or a collision occurs, please report the position (in latitude and longitude) to the Department of Fisheries and Oceans via any Canadian Coast Guard Radio Station, or fax at 902-426-8003 or via Fundy Traffic Control (VHF channel 14).

# **Search and Rescue**

The Canadian Forces coordinate all Search and Rescue activities in Canada, in Canadian waters and on the high seas off the Atlantic coasts of Canada and operate a Rescue Coordination Center at Halifax, N.S., for this purpose. Canadian Coast Guard Officers are attached to the RCC to give advice on marine matters and to assist the Canadian Forces Officers in coordinating Search and Rescue operations.

Canadian government vessels deployed on search and rescue missions may display a square flag having an orange triangle on a yellow background.

The RCC at Halifax maintains a 24-hour watch (call VCS) on 500 kHz, 2182 kHz, and 156.8 MHz. A ship-to-air distress signal for use in Canadian waters has been designed in

conjunction with the Canadian Forces Search and Rescue Authorities.

The signal consists of a cloth painted with fluorescent paint showing a disc and square to represent the ball and flag of the well-known visual distress signal.

The signal should be secured across a hatch or cabin top. In the event of foundering it should be displayed by survival craft. Search and rescue aircraft will recognize this signal as a distress signal and will look for it in the course of a search.

Other aircraft on seeing this signal are requested to make a sighting report to the RCC.

Search Initiator Buoys on tugs of more than 5 gross tons consist of a float free buoy attached to the tug with free running cable. In the event the tug sinks, the buoy will float free and mark the wreck. It is equipped with a radio transmitter capable of sending radio signals on frequencies of 121.5 MHz and 243 MHz. An amber or white light of high intensity attached to the top of the buoy is visible for at least 5 miles and operates for 48 hours. The buoy is radar reflective and painted fluorescent orange.

Stations equipped with a lifeboat are situated at the following places which maintain a 24-hour watch on 2182 kHz: Louisbourg, N.S. (45°55′N., 59°58′W.), Shippegan, N.B. (47°45′N., 64°42′W.), and Souris, Prince Edward Island (46°21′N., 62°15′W.). The stations at Souris and Shippegan are seasonal from May to the end of November. Fishermans Harbor (45°07′N., 61°40′W.), Clarks Harbor (43°26′N., 65°38′W.), Westport (44°16′N., 66°21′W.), Dartmouth (44°40′N., 63°34′W.) (C.G. cutters), Burin (47°03′N., 55°10′W.), and Twillingate (49°42′N., 54°45′W.) are additional rescue stations.

There is a Coast Guard station on Sable Island (43°56'N., 60°01'W.) equipped with line-throwing apparatus.

There are no Coast Guard stations on the coasts of Labrador or Hudson Bay. In Hudson Strait a Coast Guard icebreaker on station can be contacted for assistance in an emergency.

#### **Signals**

Mariners are informed that, if it is necessary for the Department of National Defense to take control of certain Canadian ports the following signals will be displayed from a conspicuous position at or near the ports concerned or by an Examination or Traffic Control Vessel. The signals and their meanings are:

- 1. Entrance to the port prohibited:
  - a. By day—Three red balls disposed vertically.
- b. By night—Three flashing red lights disposed vertically and visible all around the horizon.
- 2. Entrance to the port permitted (night signal)—Three green lights disposed vertically and visible all around the horizon.
- 3. Movement of Shipping within the Port or anchorage prohibited
  - a. By day—A blue flag.
  - b. By night—Red, green, and red lights disposed vertically and visible all around the horizon.

The lights described above will be carried in addition to the ordinary navigation lights of Examination Vessels.

Masters of vessels are warned that should they approach the entrance to a port which is being controlled by the Department of National Defense they should not enter a declared Dangerous Area or approach boom defenses without permission, nor should they anchor or stop in a dangerous area or prohibited anchorage unless instructed to do so.

Masters are advised therefore to communicate with any government or port authority vessel found patrolling in the area to ascertain the recommended approach route to the port.

In certain circumstances it may be necessary to take special measures to examine, or to establish the identity of, vessels desiring to enter ports and to control their entry. This is the function of the Examination Service, whose officers will be afloat in Examination Vessels or Traffic Control Vessels.

These vessels will wear the distinguishing flags of the Examination Service. The examination service special flag consists of a red and white center with a blue border, and the national flag of Canada.

Canadian signal regulations are subject to frequent additions and changes. U.S. Notice of Mariners No. 1 for the current year should be consulted.

# **Submarine Operating Areas**

The Canadian Maritime Command operates submarines on the Atlantic coast, based at Halifax, N.S. Mariners are cautioned that they may encounter these submarines anywhere off the Canadian coasts, particularly in the vicinity of the home port. U.S. Navy submarines are also frequently encountered off the coasts of Canada.

Submarines may be surfaced or submerged, operating independently or with surface ships and/or aircraft.

Warnings that submarines are exercising in specified areas may be issued as "CANHYDROLANT" messages on standard navigational warning broadcasts.

Area	Coordinates	Chartlet No.*
Alpha	44°42'N, 63°00'W 44°19'N, 63°00'W 44°19'N, 63°40'W 42°28'N, 63°40'W <b>Note.</b> —Does not include Halifax Har- bor. Extends to har- bor limits only.	1
Bravo	44°28'N, 63°40'W 44°19'N, 63°40'W 44°19'N, 64°00'W 44°28'N, 64°05'W	1
Charlie One	44°28'N, 64°05'W 44°19'N, 64°00'W 44°00'N, 64°00'W 44°00'N, 64°40'W	1
Charlie Two	44°00'N, 64°40'W 44°00'N, 64°00'W 43°30'N, 64°00'W 43°30'N, 65°24'W	1

Area	Coordinates	Chartlet No.*
Charlie Three	43°30'N, 65°00'W 43°30'N, 64°00'W 43°00'N, 64°00'W 43°00'N, 65°00'W	1
Delta One	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Delta Two	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Delta Three	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Delta Four	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Echo One	44°59'N, 62°00'W 44°00'N, 62°00'W 44°00'N, 63°00'W 44°42'N, 63°00'W	1
Echo Two	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Foxtrot One	45°03'N, 66°46'W 44°48'N, 66°46'W Along the east coast of Grand Manan Is- land 44°36'N, 66°54'W 44°00'N, 66°54'W 44°00'N, 66°09'W	1
Foxtrot Two	44°00'N, 66°09'W 44°00'N, 66°36'W 43°00'N, 66°36'W 43°00'N, 66°00'W 43°43'N, 66°00'W	1
Foxtrot Three	43°33.0'N, 66°00.0'W 43°00.0'N, 66°00.0'W 43°00.0'N, 65°00.0'W 43°30.0'N, 65°00.0'W 43°30.0'N, 65°24.5'W	1
Foxtrot Four	43°00'N, 66°00'W 43°00'N, 65°00'W 42°00'N, 65°00'W 42°00'N, 66°00'W	1

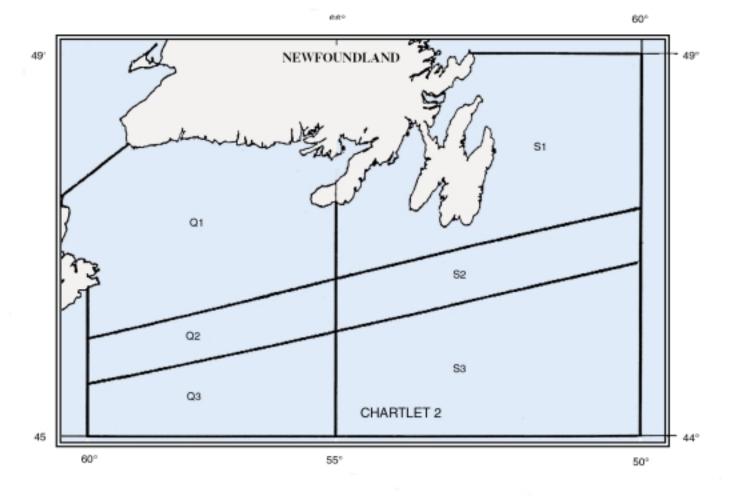
Area	Coordinates	Chartlet No.*
Foxtrot Five	43°00'N, 66°36'W 43°00'N, 66°00'W 42°00'N, 66°00'W 42°00'N, 66°36'W	1
Golf One	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Golf Two	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Golf Three	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Golf Four	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Hotel One	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Hotel Two	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Hotel Three	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
Hotel Four	44°19'N, 64°00'W 44°19'N, 63°45'W 44°10'N, 63°45'W 44°10'N, 64°00'W	1
India	45°16'N, 61″00'W 44°00'N, 61°00'W 44°00'N, 62°00'W 44°59'N, 62°00'W	1
Juliet	45°53'N, 60°00'W 44°00'N, 60°00'W 44°00'N, 61°00'W 45°16'N, 61°00'W	1
Lima One	43°00'N, 65°00'W 43°00'N, 64°00'W 42°00'N, 64°00'W 42°00'N, 65°00'W	1
Lima Two	42°00'N, 65°00'W 42°00'N, 64°00'W 41°00'N, 64°00'W 41°00'N, 65°00'W	1

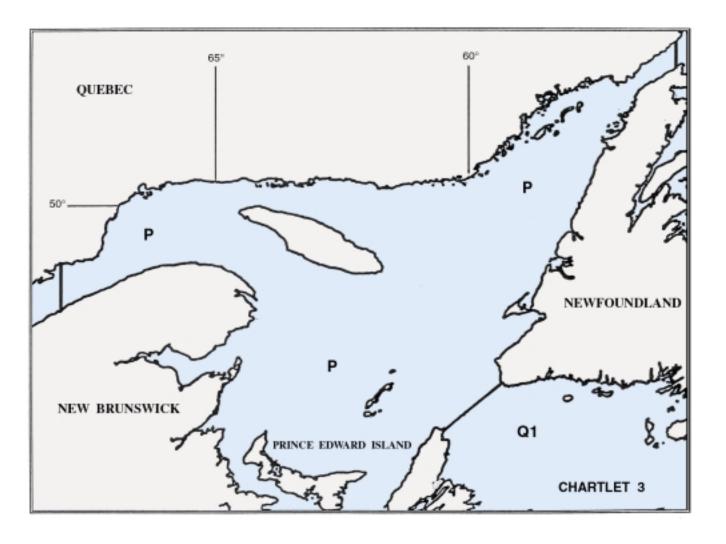
Area	Coordinates	Chartlet No.*
Lima Three	41°00'N, 65°00'W 41°00'N, 64°00'W 40°00'N, 64°00'W 40°00'N, 65°00'W	1
Mike One	43°00'N, 64°00'W 43°00'N, 63°00'W 42°00'N, 63°00'W 42°00'N, 64°00'W	1
Mike Two	42°00'N, 64°00'W 42°00'N, 63°00'W 41°00'N, 63°00'W 41°00'N, 64°00'W	1
Mike Three	41°00'N, 63°00'W 41°00'N, 62°00'W 40°00'N, 62°00'W 40°00'N, 63°00'W	1
November One	43°00'N, 63°00'W 43°00'N, 62°00'W 42°00'N, 62°00'W 42°00'N, 63°00'W	1
November Two	42°00'N, 63°00'W 42°00'N, 62°00'W 41°00'N, 62°00'W 41°00'N, 63°00'W	1
November Three	41°00'N, 63°00'W 41°00'N, 62°00'W 40°00'N, 62°00'W 40°00'N, 63°00'W	1
Papa	Gulf of St. Law- rence bounded by the following three sets of lines:	3
	Line 1— 47°00'N, 60°25'W 47°37'17.1"N, 59°18'16.8"W	
	<b>Line 2</b> — 51°35'N, 56°00'W 51°54'N, 56°00'W	
	Line 3— 49°18'N, 68°00'W 48°41'N, 68°00'W	

Area	Coordinates	Chartlet No.*
Quebec One	46°56'N, 55°30'W 46°00'N, 55°30'W 45°17'N, 60°00'W 45°53'N, 60°00'W and a line joining 47°00'N, 60°25'W to 47°37'17.1"N, 59°18'16.8"W <b>Note.</b> —Does not include the French territorial waters of Saint-Pierre et Mi- quelon.	2
Quebec Two	45°17'N, 60°00'W 46°00'N, 55°30'W 45°20'N, 55°30'W 44°45'N, 60°00'W <b>Note.</b> —Does not include the French territorial waters of Saint-Pierre et Miquelon.	2
Quebec Three	44°45'N, 60°00'W 45°20'N, 55°30'W 44°00'N, 55°30'W 44°00'N, 60°00'W <b>Note.</b> —Does not include the French territorial waters of Saint-Pierre et Miquelon.	2
Sierra One	48°40'N, 53°05'W 48°40'N, 50°00'W 46°47'N, 50°00'W 46°00'N, 55°30'W 46°56'N, 55°30'W	2
Sierra Two	46°00'N, 55°30'W 46°47'N, 50°00'W 46°10'N, 50°00'W 45°20'N, 55°30'W	2
Sierra Three	45°20'N, 55°30'W 46°10'N, 50°00'W 44°00'N, 50°00'W 44°00'N, 55°30'W	2
Note.—Chartlet titled "Firing Areas	No. 1 may be found in"	the section

# **Time Zone**

Canada has several time zones. See Chart 76, Time Zone Chart of the World, for further information.





# U.S. Embassy

The U.S. Embassy is situated at 100 Wellington Street, K1P 5T1, Ottawa. The mailing address is P.O. Box 5000, Ogdensburg, NY 13669-0430.

Consulates General are located in Calgary, Halifax, Quebec, Montreal, Toronto, and Vancouver.